

WHAT IS CLAIMED IS:

1. Multimedia content which is created using Synchronized Multimedia Integration Language (SMIL), the multimedia content comprising:

a first element which has a first attribute that initializes one or more variables; and

a second element which has a second attribute that implements a memory function by expressing one or more operations on one or more variables.

2. The multimedia content of claim 1, wherein the multimedia content further comprises a third element which expresses one or more results of the operations on the variables.

3. The multimedia content of claim 2, wherein the third element has a third attribute that expresses an executing condition of the third element.

4. The multimedia content of claim 1, wherein the second attribute of the second element expresses at least one from the group of an arithmetic operation, a relational operation, a logical operation, and an "if" phrase of the variables.

5. The multimedia content of claim 1, wherein the second attribute of the second element contains a processing condition for processing said one or more operations on said one or more variables.

6. The multimedia content of claim 1, wherein said one or more operations on said one or more variables of the second element are processed when the second element is parsed.

7. The multimedia content of claim 1, wherein the first attribute of the first element is expressed as a first attribute name =“variable=0;”, and the second attribute of the second element is expressed as a second attribute name =“operation on variable”.

8. The multimedia content of claim 7, wherein the first attribute of the first element is expressed as var=“x=0;”, and the second attribute of the second element is expressed as var=“x=x ♦ n;” (here, ♦ is an arithmetic operator and n is a numeric value if required by the arithmetic operator).

9. The multimedia content of claim 7, wherein the first attribute of the first element is expressed as var=“x=0;”, and the second attribute of the

second element is expressed as `var="count++; sum+=m;"`, `m` being a numeric value.

10. The multimedia content of claim 8, wherein the third attribute of the third element is expressed as an attribute name = "executing condition of corresponding tag".

11. The multimedia content of claim 10, wherein the attribute of the third element is expressed as condition = "executing condition".

12. Multimedia content which are created using Synchronized Multimedia Integration Language (SMIL), the multimedia content comprising:

at least one element including a first element,

wherein said first element has an attribute that expresses a function for the first element and the content to be processed when the function is true.

13. Multimedia content of claim 12, wherein the function is true when a rendering region of the first element overlaps with a rendering region of a second element, and the attribute of the first element expresses ending rendering of the first element if the function is true.

14. Multimedia content of claim 12, wherein the function is true when rendering regions of a second element and a third element overlap with one another, and the attribute of the first element expresses beginning rendering of a predetermined element if the function is true.

15. A method of creating multimedia content using Synchronized Multimedia Integration Language (SMIL), the method comprising:

(a) initializing one or more variables by using a first attribute of a first element; and

(b) implementing a memory function by expressing one or more operations on said one or more variables by using a second attribute of a second element.

16. The method of claim 15, further comprising (c) expressing an executing condition of a third element according to one or more results from the operations on the variables using a third attribute of the third element.

17. The method of claim 15, wherein implementing a memory function in step (b) includes expressing at least one from the group of an arithmetic operation, a relational operation, a logical operation, and an "if" phrase of the variables.

18. The method of claim 15, wherein step (b) further comprises adding an executing condition for executing the operations on the variables.

19. The method of claim 18, wherein step (b) further comprises expressing the executing condition using timing attributes defined in SMIL.

20. The method of claim 15, wherein step (a) is initialized as $\text{var} = "x=0;"$, and the second element is initialized as $\text{var} = "x=x \diamond n;"$ (here, \diamond is an arithmetic operator and n is a numeric value if required by the arithmetic operator).

21. A method of creating multimedia content using a Synchronized Multimedia Integration Language, the method comprising:

- (a) defining at least one function in a first element; and
- (b) expressing content to be processed when the function is true using an attribute of the first element.

22. The method of claim 21, wherein step (b) includes expressing the content to be processed using an "action" attribute of the first element.

23. The method of claim 21, wherein step (a) comprises defining the function as true when a rendering region of the first element overlaps with a rendering region of a second element, and step (b) includes completing rendering of the first element if the function is true.

24. The method of claim 21, wherein step (a) comprises defining a function as true when rendering regions of a second element and a third element overlap with one another, and step (b) includes starting rendering of a predetermined element using the action attribute.

25. A method of creating multimedia content, which is created using a Synchronized Multimedia Integration Language (SMIL), the method comprising:

(a) processing a first element, which defines one or more operations on one or more variables, by parsing the first element and implementing a function of memory.

26. The method of claim 25, wherein step (a) comprises parsing and processing the first element if each of one or more executing conditions of the first element are satisfied.

27. The method of claim 25, further comprising (b) parsing a second element with at least one defined function and processing the second element according to content to be processed when the function is true.

28. The method of claim 27, wherein step (b) further comprises processing the second element according to content expressed using the action attribute.